Spirinia parasitifera (Bastian, 1865)
(Fig. 3)

Material studied : five males, five females.
Locality : Southern Bight of the North Sea ; 21 localities (*in* Vincx, 1986)
Measurements

$$\delta 1 = \frac{- \; 86\,166\,M2660}{1736 \;\; 44\,48 \;\; 48} \; 2\,835\ \mu m \text{ (slide n° 10153, RUG),}$$

a = 59.1, b = 17.1, c = 16.2, c' = 3.6, spic = 79 μm.

$$♀ 1 = \frac{- \; -166\,1682 \;\; 3183}{17 - 48 \;\; 74 \;\; 48} \; 3\,380\ \mu m \text{ (slide n° 10154, RUG),}$$

a = 45.7, b = 20.4, c = 17.2, c' = 4.1, V = 49.8.
Other specimens :

		Males (n = 4)	*Females (n = 4)*
L	:	3030-3450	2915-3420
a	:	43.3-56.6	39.4-48.9
b	:	17.1-19.3	16.7-19.5
c	:	18.0-18.3	14.8-16.0
c'	:	3.2-4.2	3.5-3.9
spic/V	:	76-86	48.2-49.9

Description and discussion

Spirinia parasitifera has been studied in about 60 papers. The North Sea specimens agree in most aspects with the already described specimens ; therefore, we will only discuss additional new features.

"En face" view of the head region indicates that the six internal labial papillae are situated at the inner side of six, clearly separated lips (Fig. 3D). The external labial papillae are situated at the outer side of the lips ; the cuticle surrounds the lip region completely ; *i.e.* in lateral view, the lips are not separated from the remainder of the head. The lips seem to be completely invaginated in lateral view. The characteristic "Diadembildung", caused by the 12-folded vestibulum is obvious in some specimens (Fig. 3C). One small dorsal tooth is present in the buccal cavity. Ventral gland absent ; numerous small epidermal gland cells are especially abundant in the pharyngeal region. The spicules are heavily sclerotized ; they consist of two parallel bars (in lateral view) provided with a well developed, closed capitulum. A cross section through the capitulum indicates that it is divided in two parts by a sagittal bar (Fig. 3K, right spicule) ; more posteriorly, the median bar becomes less pronounced and finally disappears (Fig. 3K left spicule). The capitulum is completely surrounded by the protractor muscles. In lateral view, a very thin velum at the ventral side of the spicule is visible. A cross section through the shaft of the spicule shows that the velum consists of a solid ventral protrusion ; this part is surrounded by the protractors too ; these muscles are bordered laterally by large granulated cells.

The female genital system consists of two, rather short, reflexed ovaries ; the anterior ovary is bent to the left ; the posterior ovary is bent to the right. Sperm cells are irregularly distributed in the proximal part of the uteri or in the unpaired uterine chamber. One or two eggs are present in each uterus.

Numerous Suctoria may be present, especially attached to the tail of the specimens.

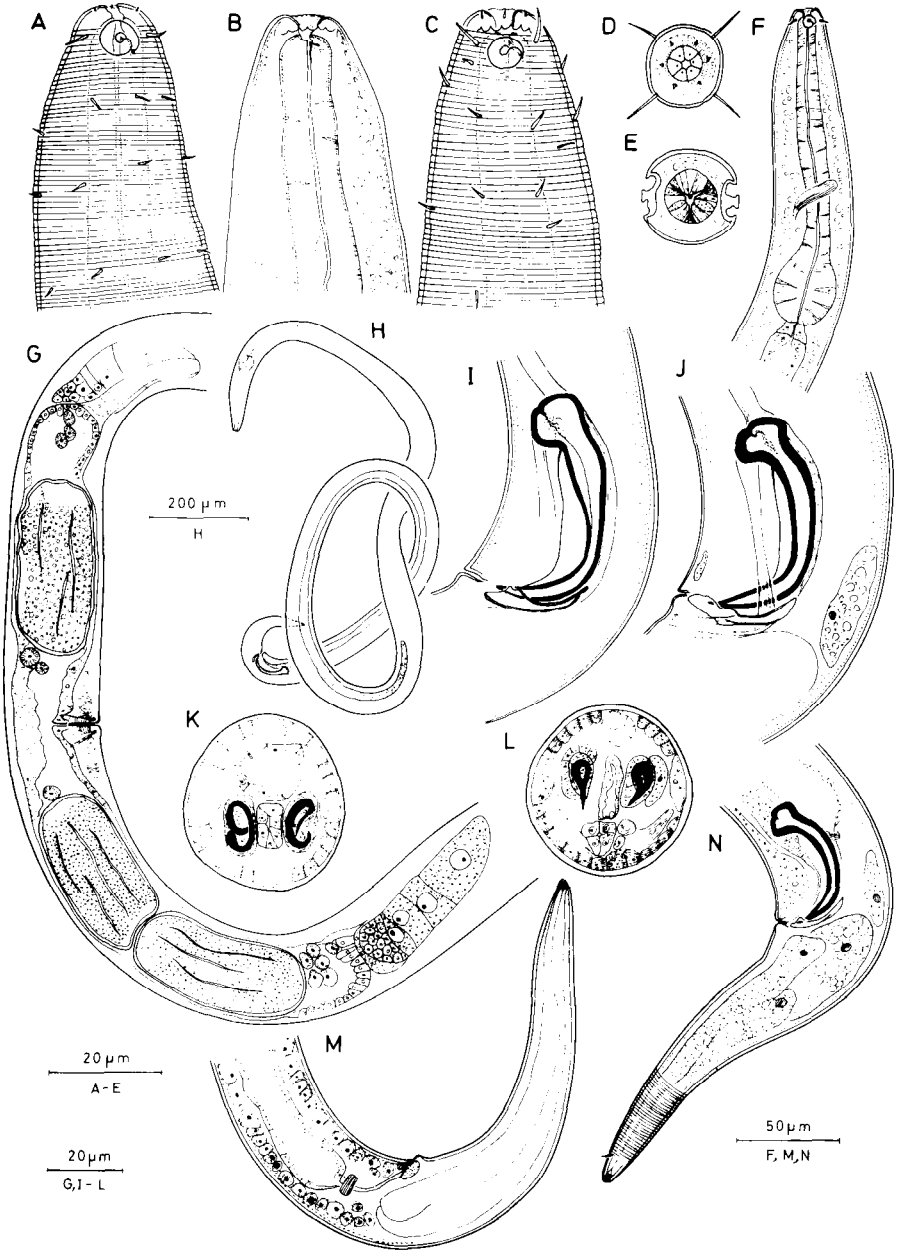

Fig. 3 - *Spirinia parasitifera*. A. Head end ♂2 ; B. Buccal cavity ♀1 ; C. Head end ♀1 ; D. Apical view of the lip region ♂ ; E. Cross section at the level of the amphideal fovea ♂ ; F. Pharyngeal region ♂1 ; G. Genital system ♀1 ; H. Total view ♂1 ; I. Copulatory apparatus ♂1 ; J. Copulatory apparatus ♂3 ; K. Cross section at the level of the capitulum of the spicules ; L. Transverse section at the level of the shaft of the spicules ; M. Tail region ♀1 ; N. Tail region ♂3. (Cross sections are orientated the dorsal side to the top of the paper).